APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,833	12/12/2001	Alan Glen Solheim	16-089	6722

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EXAMINER
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ART UNIT	PAPER NUMBER
2613	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)	
Office Action Summary	10/017,833	SOLHEIM ET AL.	
	Examiner	Art Unit	
	Hanh Phan	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>10 January 2008</u>.

2a) ☐ This action is **FINAL**.　　2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1 and 3-36</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1 and 3-36</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a) ☐ All　b) ☐ Some * c) ☐ None of:

　　　1. ☐ Certified copies of the priority documents have been received.

　　　2. ☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This Office Action is responsive to the Amendment filed on 01/10/2008.

2.   Based on **35.U.S.C 120 Benefit of earlier filing date in the United States**: An

application for patent for an invention disclosed in the manner provided by the first

paragraph of section 112 of this title in an application previously filed in the United

States, or as provided by section 363 of this title, which is filed by **an inventor** or

inventors named in the previously filed application shall have the same effect, as to

such invention, as though filed on the date of the prior application.

       -Because <u>the inventors named in the parent case (09/909,265) and the</u>

<u>inventors named in the instant case (10/017,883) are different completely</u>.

Therefore, the effective date of the instant application is now the filing date of the instant

application.

Double Patenting

3.   The nonstatutory double patenting rejection is based on a judicially created
doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the
unjustified or improper timewise extension of the "right to exclude" granted by a patent
and to prevent possible harassment by multiple assignees.   A nonstatutory
obviousness-type double patenting rejection is appropriate where the conflicting claims
are not identical, but at least one examined application claim is not patentably distinct
from the reference claim(s) because the examined application claim is either anticipated
by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140
F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29
USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.
1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422
F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163
USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4.   Claims 1, 3, 4, 8, 10-13, 15-23, 25-28, 30-33, 35 and 36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-30 of U.S. Patent No. 7,171,124 (Smith et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 1, 3, 4, 8, 10-13, 15-23, 25-28, 30-33, 35 and 36 of the instant application are encompassed by claims 1-30 of U.S. Patent No. 7,171,124 (Smith et al).

10/017,833 (Claims 1, 10, 18, 21, 25 and 33)	US Patent No. 7,171,124 (Claims 19, 21 and 23-30)
a method of optimizing the performance of a connection in a wavelength switched optical network, comprising: for all wavelengths available for transporting user signals in said network, storing wavelength performance data in a wavelength performance database;	a method of optimizing the performance of a connection in a wavelength switched optical network, comprising: for all wavelengths available for transporting user signals in said network, storing wavelength performance data in a wavelength performance database (Claims 19, 21 and 23-30);

selecting a path with one or more regenerator sections; and	selecting a path with one or more regenerator sections (Claims 19, 21 and 23-30); and
assigning a set of wavelengths to the path based on the wavelength performance data wherein the assignment step further comprises: (a) for each regenerator section of the path, selecting a wavelength from the wavelength performance database based on connectivity data for the regenerator section available from a topology database; (b) determining a path performance parameter; (c) establishing the connection along the path whenever the path performance parameter is better than a threshold; and (d) otherwise, selecting a further path and repeating steps a) to c).	assigning a set of wavelengths to the path based on the wavelength performance data wherein the assignment step further comprises: (a) for each regenerator section of the path, selecting a wavelength from the wavelength performance database based on connectivity data for the regenerator section available from a topology database; (b) determining a path performance parameter; (c) establishing said connection along the path whenever the path performance parameter is better than a threshold; and (d) otherwise, selecting a further path and repeating steps a) to c)(Claims 19, 21 and 23-30).

Regarding claim 3, as similarly described above, Smith et al teaches the path performance parameter is the Q factor (i.e., Claim 29 of Smith et al).

Regarding claim 4, as similarly described above, Smith et al teaches the step of determining comprises: identifying all optical devices connected in the path from the topology database; importing measured performance data for the path and device specifications for the optical devices; and calculating the path performance parameter using the measured performance data and the device specifications (i.e., claims 19, 21 and 23-30 of Smith et al).

Regarding claim 8, as similarly described above, Smith et al teaches determining a worst performing wavelength of the set of wavelengths and upgrading the connection by replacing the worst performing wavelength (i.e., Claim 21 of Smith et al).

Regarding claim 11, as similarly described above, Smith et al teaches comprising: for a specified regenerator section of the path, modifying operation of a selected wavelength for increasing the reach of the selected wavelength; and controlling operation of all other wavelengths passing through the specified regenerator section for maintaining a respective wavelength performance data for the respective other wavelengths within a respective range (i.e., Claims 19, 21 and 23-30 of Smith et al).

Regarding claim 12, as similarly described above, Smith et al teaches the step of modifying comprises adjusting a tunable parameter of a device of the specified regenerator section (i.e., Claims 19, 21 and 23-30 of Smith et al).

Regarding claim 13, as similarly decribed above, Smith et al teaches the tunable parameter is one of gain, dispersion or both (i.e., Claims 1-30 of Smith et al).

Regarding claim 15, as similarly described above, Smith et al teaches the step of assigning comprises mapping a transmitter to the wavelength according to reach performance of the transmitter (i.e., Claims 1-30 of Smith et al).

Regarding claim 16, as similarly described above, Smith et al teaches the step of assigning comprises mapping a receiver to the wavelength according to the performance of the receiver (i.e., Claims 1-30 of Smith et al).

Regarding claim 17, as similarly described above, Smith et al teaches comprising replacing the selected wavelength with a different wavelength from a different transmission band from that of the selected wavelength (i.e., Claims 1-30 of Smith et al).

Regarding claim 20, as similarly described above, Smith et al teaches storing the performance parameter in a measurement database (i.e., Claims 1-30 of Smith et al).

Regarding claims 19 and 22, as similarly described above, Smith et al teaches the path performance parameter includes the cost of the path and the Q factor of the path (i.e., Claims 1-30 of Smith et al).

Regarding claim 23, as similarly described above, Smith et al teaches further comprising: a measurement database for storing measured performance data for each regenerator section of the network; and an interface between the measurement database and a plurality of optical devices of the network for transmitting the measured performance data from the devices to the measurement database (i.e., Claims 1-30 of Smith et al).

Regarding claim 26, as similarly described above, Smith et al teaches further comprising collecting a plurality of further performance data from an optical device connected in the path (i.e., Claims 1-30 of Smith et al).

Regarding claims 27 and 28, as similarly described above, Smith et al further teaches the optical device is an optical amplifier and the further performance data is one or more of span gain/loss, power level and reflections level (i.e., Claims 1-30 of Smith et al).

Regarding claims 30-32, 35 and 36, as similarly described above, Smith et al further teaches the optical device is a receiver and the further performance data is one or more of the sensitivity level, BER, Q factor, and eye opening (i.e., Claims 1-30 of Smith et al).

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1 and 3-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith et al (US Patent No. 7,171,124).

The applied reference has a common assignee with the instant application.
Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art
under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome
either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in
the reference was derived from the inventor of this application and is thus not the
invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1, 10, 18, 21, 25 and 33, referring to Figures 1 and 2, Smith et
al teaches a method of optimizing the performance of a connection in a wavelength
switched optical network, comprising:

for all wavelengths available for transporting user signals in the network, storing
wavelength performance data in a wavelength performance database (i.e., Figs. 1 and
2, from col. 4, line 4 to col. 17, line 54);

selecting a path with one or more regenerator sections (i.e., Figs. 1 and 2, from
col. 4, line 4 to col. 17, line 54); and

assigning a set of wavelengths to the path based on the wavelength performance
data wherein the assignment step further comprises: (a) for each regenerator section of
the path, selecting a wavelength from the wavelength performance database based on
connectivity data for the regenerator section available from a topology database; (b)
determining a path performance parameter; (c) establishing said connection along the
path whenever the path performance parameter is better than a threshold; and (d)
otherwise, selecting a further path and repeating steps a) to c) (i.e., Figs. 1 and 2, from
col. 4, line 4 to col. 17, line 54).

Regarding claim 3, Smith et al further teaches the path performance parameter is the Q factor (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 4, Smith et al further teaches the step of determining comprises: identifying all optical devices connected in the path from the topology database; importing measured performance data for the path and device specifications for the optical devices; and calculating the path performance parameter using the measured performance data and the device specifications (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 5, Smith et al further teaches the wavelength performance data comprises a correspondence between attainable reach for each wavelength available in the network and a plurality of fiber types (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 6, Smith et al further teaches the wavelength performance data further includes launch power-reach information for all wavelengths available in the network (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 7, Egner et al further teaches the step of storing includes grouping all wavelengths available in the network into bins of reach, each bin corresponding to a different range of reach distances, and categorizing the wavelengths within a bin by fiber type (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 8, Egner et al further teaches determining a worst performing wavelength of the set of wavelengths and upgrading the connection by replacing the worst performing wavelength (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 9, Smith et al further teaches the wavelength performance data includes the wavelength natural reach for all wavelengths available in the network for a plurality of fiber types, and the connectivity data includes the length of the regenerator section (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 11, Smith et al teaches further comprising: for a specified regenerator section of the path, modifying operation of a selected wavelength for increasing the reach of the selected wavelength; and controlling operation of all other wavelengths passing through the specified regenerator section for maintaining a respective wavelength performance data for the respective other wavelengths within a respective range (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 12, Smith et al further teaches the step of modifying comprises adjusting a tunable parameter of a device of the specified regenerator section (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 13, Smith et al further teaches the tunable parameter is one of gain, dispersion or both (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 14, Smith et al further teaches the step of modifying comprises controlling the launch power of the selected wavelength (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 15, Smith et al further teaches the step of assigning comprises mapping a transmitter to the wavelength according to reach performance of the transmitter (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 16, Smith et al further teaches the step of assigning comprises mapping a receiver to the wavelength according to the performance of the receiver (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 17, Smith et al teaches further comprising replacing the selected wavelength with a different wavelength from a different transmission band from that of the selected wavelength (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 19, Smith et al further teaches the step of measuring comprises, for each node of the network: determining all free wavelengths that are not used for live traffic exiting the node; for each the free wavelength, setting up a test connection between a transmitter at the node and a next receiver; and measuring the performance parameter for all the test connections (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 20, Smith et al further teaches storing the performance parameter in a measurement database (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 22, Smith et al further teaches the path performance parameter includes the cost of the path and the Q factor of the path (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 23, Smith et al teaches further comprising: a measurement database for storing measured performance data for each regenerator section of the network; and an interface between the measurement database and a plurality of optical

devices of the network for transmitting the measured performance data from the devices

to the measurement database (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 24, Smith et al teaches further comprising a wavelength

exerciser for setting-up test connections on all regenerator sections, for each

wavelength unused on the regenerator section to populate the measurement database

with measured data (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 26, Smith et al teaches further comprising collecting a plurality

of further performance data from an optical device connected in the path (i.e., Figs. 1

and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 27, Smith et al further teaches the optical device is an optical

amplifier and the further performance data is one or more of span gain/loss, power level

and reflections level (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 28, Smith et al further teaches the optical device is an optical

amplifier and the further performance data is one or both of the Raman power and

Raman gain (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 29, Smith et al further teaches the optical device is a transmitter

and the further performance data is the launch power (i.e., Figs. 1 and 2, from col. 4,

line 4 to col. 17, line 54).

Regarding claim 30, Smith et al further teaches the optical device is a receiver

and the further performance data is one or more of the sensitivity level, BER, Q factor,

and eye opening (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 31, Smith et al further teaches the optical device is a receiver and the further performance data is the link chromatic dispersion (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 32, Smith et al further teaches the measured performance data include power levels and noise levels measured in each the respective measurement point for each wavelength traveling along the path (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 34, Smith et al further teaches the step of modifying comprises adjusting the launch power of the specified wavelength until a performance parameter of the regenerator section is within an operational range (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 35, Smith et al further teaches the step of modifying comprises changing the gain/loss of the specified wavelength (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

Regarding claim 36, Smith et al further teaches the step of controlling includes selecting the other wavelengths to provide greater wavelength spacing (i.e., Figs. 1 and 2, from col. 4, line 4 to col. 17, line 54).

7.   Claims 1and 3-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al (US Patent No. 6,996,342).

Regarding claims 1, 10, 18, 21, 25 and 33, referring to Figures 1 and 2, Park et al teaches a method of optimizing the performance of a connection in a wavelength switched optical network, comprising:

for all wavelengths available for transporting user signals in said network, storing
wavelength performance data in a wavelength performance database (i.e., Figs. 1 and
2, from col. 5, line 65 to col. 10, line 44);

selecting a path with one or more regenerator sections (i.e., Figs. 1 and 2, from
col. 5, line 65 to col. 10, line 44) and

assigning a set of wavelengths to the path based on the wavelength performance
data wherein the assignment step of further comprises: (a) for each regenerator section
of the path, selecting a wavelength from the wavelength performance database based
on connectivity data for the regenerator section available from a topology database; (b)
determining a path performance parameter; (c) establishing said connection along the
path whenever the path performance parameter is better than a threshold; and (d)
otherwise, selecting a further path and repeating steps a) to c) (i.e., Figs. 1 and 2, from
col. 5, line 65 to col. 10, line 44).

Regarding claim 3, Park et al further teaches the path performance parameter is
the Q factor (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 4, Park et al further teaches the step of determining comprises:
identifying all optical devices connected in the path from the topology database;
importing measured performance data for the path and device specifications for the
optical devices; and calculating the path performance parameter using the measured
performance data and the device specifications (i.e., Figs. 1 and 2, from col. 5, line 65
to col. 10, line 44).

Regarding claim 5, Park et al further teaches the wavelength performance data comprises a correspondence between attainable reach for each wavelength available in the network and a plurality of fiber types (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 6, Park et al further teaches the wavelength performance data further includes launch power-reach information for all wavelengths available in the network (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 7, Park et al further teaches the step of storing includes grouping all wavelengths available in the network into bins of reach, each bin corresponding to a different range of reach distances, and categorizing the wavelengths within a bin by fiber type (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 8, Park et al further teaches determining a worst performing wavelength of the set of wavelengths and upgrading the connection by replacing the worst performing wavelength (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 9, Park et al further teaches the wavelength performance data includes the wavelength natural reach for all wavelengths available in the network for a plurality of fiber types, and the connectivity data includes the length of the regenerator section (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 11, Park et al teaches further comprising: for a specified regenerator section of the path, modifying operation of a selected wavelength for increasing the reach of the selected wavelength; and controlling operation of all other wavelengths passing through the specified regenerator section for maintaining a

respective wavelength performance data for the respective other wavelengths within a
respective range (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 12, Park et al further teaches the step of modifying comprises
adjusting a tunable parameter of a device of the specified regenerator section (i.e., Figs.
1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 13, Park et al further teaches the tunable parameter is one of
gain, dispersion or both (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 14, Park et al further teaches the step of modifying comprises
controlling the launch power of the selected wavelength (i.e., Figs. 1 and 2, from col. 5,
line 65 to col. 10, line 44).

Regarding claim 15, Park et al further teaches the step of assigning comprises
mapping a transmitter to the wavelength according to reach performance of the
transmitter (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 16, Park et al further teaches the step of assigning comprises
mapping a receiver to the wavelength according to the performance of the receiver (i.e.,
Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 17, Park et al teaches further comprising replacing the selected
wavelength with a different wavelength from a different transmission band from that of
the selected wavelength (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 19, Park et al further teaches the step of measuring comprises,
for each node of the network: determining all free wavelengths that are not used for live
traffic exiting the node; for each the free wavelength, setting up a test connection

between a transmitter at the node and a next receiver; and measuring the performance

parameter for all the test connections (i.e., Fig. 1, pages 2-7, paragraphs [0031]-[0066]).

Regarding claim 20, Park et al further teaches storing the performance

parameter in a measurement database (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10,

line 44).

Regarding claim 22, Park et al further teaches the path performance parameter

includes the cost of the path and the Q factor of the path (i.e., Figs. 1 and 2, from col. 5,

line 65 to col. 10, line 44).

Regarding claim 23, Park et al teaches further comprising: a measurement

database for storing measured performance data for each regenerator section of the

network; and an interface between the measurement database and a plurality of optical

devices of the network for transmitting the measured performance data from the devices

to the measurement database (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 24, Park et al teaches further comprising a wavelength

exerciser for setting-up test connections on all regenerator sections, for each

wavelength unused on the regenerator section to populate the measurement database

with measured data (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 26, Park et al teaches further comprising collecting a plurality of

further performance data from an optical device connected in the path (i.e., Figs. 1 and

2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 27, Park et al further teaches the optical device is an optical amplifier and the further performance data is one or more of span gain/loss, power level and reflections level (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 28, Park et al further teaches the optical device is an optical amplifier and the further performance data is one or both of the Raman power and Raman gain (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 29, Park et al further teaches the optical device is a transmitter and the further performance data is the launch power (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 30, Park et al further teaches the optical device is a receiver and the further performance data is one or more of the sensitivity level, BER, Q factor, and eye opening (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 31, Park et al further teaches the optical device is a receiver and the further performance data is the link chromatic dispersion (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 32, Park et al further teaches the measured performance data include power levels and noise levels measured in each the respective measurement point for each wavelength traveling along the path (i.e., Figs. 1 and 2, from col. 5, line 65 to col. 10, line 44).

Regarding claim 34, Park et al further teaches the step of modifying comprises adjusting the launch power of the specified wavelength until a performance parameter

of the regenerator section is within an operational range (i.e., Figs. 1 and 2, from col. 5,
line 65 to col. 10, line 44).

Regarding claim 35, Park et al further teaches the step of modifying comprises
changing the gain/loss of the specified wavelength (i.e., Figs. 1 and 2, from col. 5, line
65 to col. 10, line 44).

Regarding claim 36, Park et al further teaches the step of controlling includes
selecting the other wavelengths to provide greater wavelength spacing (i.e., Figs. 1 and
2, from col. 5, line 65 to col. 10, line 44).

Response to Arguments

8   Applicant's arguments with respect to claims 1 and 3-36 have been considered
but are moot in view of the new ground(s) of rejection.

9   The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure.

Xin et al (Pub. No. : US 2005/0271038) discloses method and system for efficient
management and transport of traffic over a network.

Levandovsky et al (US Patent No. 7,095,956) discloses method and apparatus
for validating a path through a switched optical network.

10   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

   If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for

the organization where this application or proceeding is assigned is (571)273-8300.

   Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703)305-

4700.

   /Hanh Phan/

Primary Examiner, Art Unit 2613